

Amendments to the Drawings:

The drawing Figure 1 has been amended. Appended to this amendment is an annotated copy of the previous drawing sheet which has been marked to show changes presented in the replacement sheet of the drawing. Applicant has re-ordered messages 6 and 7 to sequentially follow message 5 as per the Examiner's suggestion.

The specific changes which have been made to Figure 1 are merely for clarification and/or consistency purposes and are in no way intended to further limit the present invention.

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

The Examiner objected to drawing Figure 1 because the visual ordering of messages in Figure 1 was not sequential, i.e., messages 6 and 7 appeared above message 5. In response to the objection, Applicant re-ordered the messages so that messages 6 and 7 appear below message 5. No new matter is being added with this amendment to the drawings.

Claims 1-10 are currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-10 are now pending in this application.

In the action of December 6, 2005, the Examiner rejected the Specification of the present invention under 35 U.S.C. § 112, first paragraph as including in the Examiner's view, unclear, unexact, and/or verbose terms. Applicant has therefore submitted a substitute specification clarifying such terms. No new matter is being added with this substitute specification.

The Examiner also cited language from Paragraph [0039] to highlight the phrase "request both" as being unclear, although Applicant believes the Examiner was referring to Paragraph 34. For further clarification, the "request both" phrase refers to the fact that the controlling radio network controller (CRNC) is able, after receiving the MBMS CRNC service context request, to (1) establish the MBMS CRNC service context for the service and (2) reserve the required radio resources. Therefore this language refers to the possible dual functionality of the CRNC.

The Examiner also indicated that the Anchor Radio Network Controller concept mentioned in the specification was unclear. For further clarification, an Anchor Radio Network Controller is merely another type of Radio Network Controller (RNC) commonly seen in generic radio access networks and generally receive all messages from a core network to a user equipment/mobile subscriber. The Anchor RNC will then direct those messages via other RNCs or to the target RNC which then delivers the messages to the user equipment/mobile subscriber. This terminology would be clearly understood by those skilled in the art.

The Examiner rejected claims 1-8 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

For claim 1, Applicant has amended the claim language for clarification purposes. For further clarification, the claim language the Examiner viewed as unclear would be understood by one of ordinary skill in the art in one sense to suggest that two separate contexts may be established, e.g., a controlling device multicast/broadcast service context and a user equipment specific multicast/broadcast service context. Moreover, the two separate contexts need not be established at the same time, as they are separate from one another. Moreover, the Examiner is directed to Paragraphs [0029]-[0033] of the Specification where it is noted that there are two distinct service devices. One serving device is the serving GPRS support node (SGSN) of the core network and the other serving device is the serving RNC (SRNC) of the radio network. Moreover, Paragraph [0029] specifically states that “In addition, the MBMS-CRNC-service context establishment is kept as a separate procedure with respect to the establishment of the UE specific MBMS context. Therefore, since they are separated, they can be initiated at different times. *The initiator is in both cases the SGSN.*” (emphasis added)

Regarding claim 2, Applicant respectfully traverses the Examiner’s rejection regarding the clarity of which service context is being activated. In particular, the Examiner is directed to claim 1, wherein there are two contexts established: (1) a multicast/broadcast service context; and (2) a user equipment specific

multicast/broadcast service context. Also, claim 2 has been amended for clarification and consistency purposes. Therefore, Applicant submits that all the claim limitations have proper antecedent basis.

As to claim 3, Applicant also respectfully traverses the Examiner's rejection. It is noted that in claim 3, a "*selection* informing step," and a "*multicast/broadcast* informing step" are claimed. It is the "*multicast/broadcast* informing step" and not the "*selection* informing step" that includes an indication about the unsuccessful coupling of the respectively joined user equipment to the multicast/broadcast service. Therefore, it is clear that the claim limitations are not redundant.

In response to the Examiner's arguments regarding the recitation of "serving device" in claims 4, 6, and, 8, Applicant has amended the claims for consistency purposes.

As for claim 5, Applicant directs the Examiner to lines 4-6 of this claim, where it is recited that "the multicast/broadcast service context is not activated and the serving device of the radio access network does not take this activated multicast/broadcast context into account when Radio Resource Controlling states for the user equipment are defined." Therefore, it is clear that if the service context is not activated, it is simply not a consideration when defining the Radio Resource Controlling states.

Regarding the recitation of rejecting dedicated channels in claim 6, how one can reject a dedicated channel is irrelevant for the purposes of the invention described in this claim. Physical or logical problems may simply arise barring the use of those dedicated channels. Moreover, a user equipment may simply cease to desire MBMS service. For this reason, Applicant submits that no amendment is necessary and that the claim would be understood by those skilled in the art.

As to the recitation of "the successful coupling" in claim 8, Applicant has amended the claim to comply with the antecedent basis rules. For claim 10, Applicant has amended the claim to remove any indefiniteness or vagueness and is no longer in a Hybrid claim format.

It should be noted that all the above amendments made in response to the Examiner's 35 U.S.C. § 112, second paragraph, rejections are being made for consistency and clarification purposes only, and are not intended to narrow the scope of the claims. The Examiner is encouraged to contact the attorney for Applicant if he would like to discuss this issue in greater detail.

The Examiner rejected claims 1-10 under 35 U.S.C. § 112, first paragraph, as being based on a non-enabling disclosure. Regarding claims 1-10, the Examiner asserted that the specifics of the MBMS service context are critical to the practice of the present invention but are not included in the claims [nor] enabled by the disclosure. Applicant respectfully traverses this rejection. The Examiner is directed to Paragraph [0004], wherein it is clearly stated that in part, an MBMS context may contain "a list of user equipment in connected mode which are present in each cell for the CRNC and which have activated (i.e., has performed the joining) a MBMS service." Moreover, Paragraph [0003] states that some assumptions regarding the MBMS architecture and procedures upon which the present invention build from, are disclosed in the early version V1.1.0 of May 2002 of document "3GPP TS 25.346." Specifically, the Examiner is directed to page 6, chapter 5.1.1 of document "3GPP TS 25.346," wherein the specific contents of an MBMS service context are discussed further. Therefore, the specific contents of an MBMS service context would be known by those skilled in the art.

Finally, document "3GPP TS 25.346" merely presents certain background technical/architecture specifications that must be followed in order to utilize MBMS service. Applicants have recognized that, in order to fulfill the requirements resulting from the technical specifications, UE specific information in an SRNC and the service specific information in a CRNC must be combined at least before the activation for the MBMS service over the air interface as discussed in Paragraph [0007] of the Specification. Therefore, it is this combining, not the exact content of an MBMS context that is critical to the practice of the present invention.

For these reasons, Applicant believes that claims 1-10 are in fact supported by an enabling disclosure and respectfully request that the rejection be withdrawn.

The Examiner rejected claims 1,5, and 7-9 under 35 U.S.C. § 102(e) as being anticipated by (3GPP TS 25-346, V1.1.0 (2002-5)).

Applicant respectfully traverses the Examiner's rejection. Regarding the rejection of claim 1, it has been already discussed above that there is no recognition in the prior art teaching that the user specific information in a serving radio network controller and the service specific information in a controlling radio network controller have to be combined at least before the activation of an MBMS service over the interface. Moreover, the prior art reference fails to specify what triggers the message MBMS attach requires. For example, page 8, chapter 7.1.1 of the prior art reference states "the signaling flow is typically initiated when an MBM service is created (the details over when the signaling flow is initiated are to be defined in SA2)." There is no discussion at all of the "user equipment active list" as recited in claim 1. In particular, chapter 7.1.3 of the prior art reference merely discloses how a new user equipment can be added to the already existing total number of user equipment in a given cell already using a MBMS service. However, this is not related at all to the initiation of such a service context, and again, it clearly fails to suggest anything relating to a user equipment active list.

For the rejection of claim 5, the Examiner cites chapter 5.1.1, lines 11-20 for the idea that if a decision to use user equipment specific dedicated channels is rejected or simply negative, the MBMS service context is not taken into account when defining Radio Resource Controlling states. However, this chapter merely discusses bearer type selection for MBMS transmissions and MBMS context updates, and in no way suggests a method wherein the multicast/broadcast service context of the controlling device is rejected. Furthermore, there is also no suggestion that if the selecting step and the selection informing step are not performed, the multicast/broadcast informing step includes an indication about the unsuccessful coupling of the respectively joined user equipment to the multicast/broadcast service. In fact, only connected UEs that have entered a cell are discussed in chapter 5.1.1. Similarly the cited section does not suggest a method wherein the serving device of the radio access network is allowed to decide whether the multicast/broadcast service informed in the multicast/broadcast service context of the controlling device is served to the user equipment by using user equipment specific dedicated channels. While the use of point-to-point and

point-to-multipoint bearers are discussed, the discussion goes no further than to mention both types may be used. Finally, the cited chapter does not suggest a method wherein if the decision about using user equipment specific dedicated channels is rejected or negative, the multicast/broadcast service context is not activated, nor is it taken into account when Radio Resource Controlling states for these specific user equipment are defined. In fact, no states of any type are discussed at all, let alone Radio Resource Controlling states, not to mention that only one context per MBMS service is contemplated by the present invention. Therefore the prior art reference does not suggest both user equipment specific MBMS service contexts as well as CRNC MBMS service contexts.

In response to the rejection of claim 7, neither chapters 7.1.1 nor Figure 1 of the prior art reference teach a serving device of a core network. Figure 1, for example, shows a message flow between a core network and a controlling RNC but does not in any way suggest or discuss a core network serving device. Likewise, chapter 7.1.2 and Figure 2 also fail to suggest or show how a user equipment specific MBMS service context and a CRNC MBMS service context can be established at different times. This portion of the prior art reference merely discusses channel type switching and which type to use.

Regarding the rejection of claim 8, the Examiner again supports the rejection based in part on chapter 7.1.1 of the prior art reference. As discussed above regarding the rejection of claim 1, no user equipment active list is ever suggested by the prior art reference. Moreover, chapter 5.1.1 never suggests nor discusses a system or method involving another CRNC.

As to the rejection of claim 9, Applicant's have amended claim 9 to describe the feature of a user equipment active list. Therefore, Applicant submits amended claim 9 as allowable for the same reasons as discussed above regarding at least claims 1 and 8.

Because the applied prior art reference does not teach, disclose or suggest the system or method of coupling user equipment information specific to a MBMS service, nor initiating a MBMS service using a user equipment active list, nor allowing for MBMS CRNC and user equipment specific service contexts to be established at different times, nor handling

unsuccessful service context information, Applicant respectfully submits that each of claims 1-10 is patentable over the applied prior art reference.

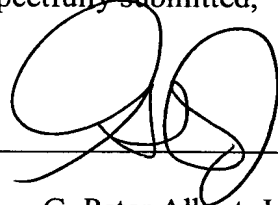
Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1450. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1450. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1450.

Respectfully submitted,

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